

Spheres HW

P674 14, 11, 17, 18, 21, 24

10. $4^2 + 3^2 = PR^2$

$5 = PR$

11. $3^2 + 8^2 = PR^2$


$8.5 \approx PR$

17. $A = 4\pi 25^2$

$2500\pi \text{ in}^2$
 7854.0 in^2

18. $A = 4\pi (14.5)^2$

2642.1 cm^2

21.  $C = 40.8 \text{ in} = 2\pi r$
 $r = 6.49$

$A = \frac{1}{2}(4\pi 6.49^2) + 6.49^2\pi$

397.4 in^2

24. $3\pi r^2$
 $A = 3(227.6)$

681.0 km^2

P704 9, 10, 13, 15

9. $V = \frac{4}{3}\pi 7.62^3$

1853.3 m^3

10. $r = 16.5$

$V = \frac{4}{3}\pi (16.5)^3$

18816.6 in^3

13. $C = 24$

$2\pi r = 24$

$r = 3.8$

$V = \frac{4}{3}\pi (3.8)^3$

233.4 in^3

15.

$V = \frac{1}{2} \cdot \frac{4}{3} (\pi 3.2^3)$

68.6 m^3